

## EAST Search History

| Ref # | Hits | Search Query  | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|---|--|------------------|---------|------------------|
| L1    | 14   | (SASAI.in. near2 TOSHIHIRO.in.)<br>or (KITAGAWA.in. near2 SHUJI.in.)  | USPAT                                      | OR               | ON      | 2006/05/30 10:26 |
| L2    | 71   | (SASAI.in. near2 TOSHIHIRO.in.)<br>or (KITAGAWA.in. near2 SHUJI.in.)  | USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/05/30 10:26 |
| L3    | 2    | (SASAI.in. near2 TOSHIHIRO.in.)<br>or (KITAGAWA.in. near2 SHUJI.in.)  | US-PGPUB                                   | OR               | ON      | 2006/05/30 10:25 |
| S1    | 6    | ccd same alternating adj color  | USPAT                                      | OR               | ON      | 2006/05/30 10:24 |
| S2    | 29   | ("4205337"   "4310847"  <br>"4330793"   "4418358"  <br>"4630120"   "4672424"  <br>"4703365"   "4709144"  <br>"4716456"   "4736251"  <br>"4745466"   "4823186"  <br>"4918523"   "4969204"  <br>"4982270"   "5023711"  <br>"5045932"   "5060061"  <br>"5081529"   "5255081"  <br>"5262847"   "5377025"  <br>"5543940"   "5619590"  <br>"5671013"   "5677528"  <br>"5978023"   "6356379"  <br>"6429953").PN. | USPAT                                      | OR               | ON      | 2003/10/15 11:43 |
| S3    | 78   | vignetting same axial   | USPAT                                      | OR               | ON      | 2003/10/15 14:11 |
| S4    | 458  | (382/274).CCLS.   | USPAT;<br>USOCR                            | OR               | OFF     | 2003/10/15 16:02 |
| S5    | 70   | (348/255).CCLS.   | USPAT;<br>USOCR                            | OR               | OFF     | 2003/10/15 14:12 |
| S6    | 86   | (348/252).CCLS.   | USPAT;<br>USOCR                            | OR               | OFF     | 2003/10/15 14:12 |
| S7    | 55   | (348/238).CCLS.   | USPAT;<br>USOCR                            | OR               | OFF     | 2003/10/15 14:12 |
| S8    | 63   | (348/237).CCLS.   | USPAT;<br>USOCR                            | OR               | OFF     | 2003/10/15 14:29 |
| S9    | 140  | ((382/274).CCLS.) and camera<br>and (luminance or brightness or Y<br>or luma)   | USPAT                                      | OR               | ON      | 2003/10/16 12:53 |
| S10   | 159  | luminance adj correction and<br>@ad<="19990226"   | USPAT                                      | OR               | ON      | 2003/10/16 10:27 |
| S11   | 284  | luminance adj correction and<br>@ad<="19990226"   | US-PGPUB;<br>USPAT;<br>EPO; JPO            | OR               | ON      | 2003/10/16 10:28 |

## EAST Search History

|     |      |  |   |    |     |                  |
|-----|------|--|---|----|-----|------------------|
| S12 | 103  | luminance adj correction and pixel and @ad<="19990226"                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO             | OR | ON  | 2003/10/16 10:28 |
| S13 | 52   | (348/228.1).CCLS.  | USPAT;<br>USOCR                             | OR | OFF | 2003/10/16 12:47 |
| S14 | 5    | ((348/228.1).CCLS.) and luminance with correct   | USPAT                                       | OR | ON  | 2003/10/16 12:48 |
| S15 | 6    | ((382/274).CCLS.) and camera and ((luminance or brightness or Y or luma) adj correction) | USPAT                                       | OR | ON  | 2003/10/16 13:12 |
| S16 | 485  | analog adj luminance   | USPAT                                       | OR | ON  | 2003/10/16 13:14 |
| S17 | 13   | analog adj luminance with correction   | USPAT                                       | OR | ON  | 2003/10/16 13:15 |
| S18 | 93   | (348/234).CCLS.  | USPAT;<br>USOCR                             | OR | OFF | 2003/10/16 13:26 |
| S19 | 79   | ((348/234).CCLS.) and @ad<="19990226"  | USPAT                                       | OR | ON  | 2003/10/16 14:17 |
| S20 | 22   | analog adj luminance near5 correct\$4  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/16 14:28 |
| S21 | 1560 | luminance same discrete  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/16 14:29 |
| S22 | 10   | luminance same discrete adj time   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/16 14:31 |
| S23 | 26   | pixel with luminance adj correction and camera   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/16 14:39 |
| S24 | 14   | axial adj luminance  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/16 15:01 |
| S25 | 30   | color adj interleaved  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/16 15:01 |
| S26 | 1    | ("5644359").PN.  | USPAT;<br>USOCR                             | OR | OFF | 2003/10/16 15:21 |
| S27 | 1    | ("4908701").PN.  | USPAT;<br>USOCR                             | OR | OFF | 2003/10/16 15:35 |

## EAST Search History

|     |        |   |   |    |     |                  |
|-----|--------|---|---|----|-----|------------------|
| S28 | 1      | ("5870505").PN.   | USPAT;<br>USOCR                             | OR | OFF | 2003/10/16 17:02 |
| S29 | 7      | luminance adj correction near5 position   | USPAT                                       | OR | ON  | 2003/10/16 17:04 |
| S30 | 1717   | vignetting  | USPAT                                       | OR | ON  | 2003/10/16 17:04 |
| S31 | 89     | vignetting with correction  | USPAT                                       | OR | ON  | 2003/10/16 17:05 |
| S32 | 2      | image adj falloff and correction  | USPAT                                       | OR | ON  | 2003/10/17 13:50 |
| S33 | 3      | image adj falloff and correction  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2003/10/17 15:42 |
| S34 | 142    | digital adj camera and ccd same color adj filter and @ad<="19990225"  | USPAT                                       | OR | ON  | 2003/10/17 15:45 |
| S35 | 5      | bayer adj filter  | USPAT                                       | OR | ON  | 2003/10/17 15:46 |
| S36 | 1      | ("5534916").PN.   | USPAT;<br>USOCR                             | OR | OFF | 2003/10/17 16:56 |
| S37 | 161    | coordinate adj position same sum  | USPAT                                       | OR | ON  | 2003/10/17 17:57 |
| S38 | 1      | ccd same (coordinate adj position) same sum   | USPAT                                       | OR | ON  | 2003/10/17 18:10 |
| S39 | 3      | image adj drop-off  | USPAT                                       | OR | ON  | 2003/10/17 18:11 |
| S40 | 9      | image adj drop adj off  | USPAT                                       | OR | ON  | 2003/10/17 18:11 |
| S41 | 2      | image adj fall-off  | USPAT                                       | OR | ON  | 2003/10/17 18:12 |
| S42 | 26     | image adj fall adj off  | USPAT                                       | OR | ON  | 2003/10/17 18:12 |
| S43 | 11     | ((ccd same (coordinate adj position) same sum) (image adj drop-off) (image adj drop adj off) (image adj fall-off) (image adj fall adj off)) and sum     | USPAT                                       | OR | ON  | 2003/10/17 18:13 |
| S44 | 16     | ((ccd same (coordinate adj position) same sum) (image adj drop-off) (image adj drop adj off) (image adj fall-off) (image adj fall adj off)) and product | USPAT                                       | OR | ON  | 2003/10/17 18:15 |
| S45 | 13     | advantage with analog with luminance  | USPAT                                       | OR | ON  | 2003/10/17 18:32 |
| S46 | 27     | analog adj luminance same correction  | USPAT                                       | OR | ON  | 2004/03/25 12:25 |
| S47 | 258    | (348/223.1).CCLS.   | USPAT;<br>USOCR                             | OR | OFF | 2004/03/25 17:29 |
| S48 | 264187 | analog adj luminance and white balance  | USPAT                                       | OR | ON  | 2004/03/25 17:29 |
| S49 | 58     | analog adj luminance and white adj balance  | USPAT                                       | OR | ON  | 2004/03/26 10:39 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S50 | 411 | analog same (white adj balance)   | USPAT   | OR | ON  | 2004/03/26 10:39 |
| S51 | 33  | analog same (white adj balance)<br>same rgb   | USPAT   | OR | ON  | 2004/03/26 11:10 |
| S52 | 27  | analog same (white adj balance)<br>with pixel   | USPAT   | OR | ON  | 2004/10/27 20:46 |
| S53 | 73  | (348/255).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2004/04/02 18:07 |
| S54 | 9   | ((348/255).CCLS.) and rgb   | USPAT   | OR | ON  | 2004/04/02 18:08 |
| S55 | 20  | ((348/255).CCLS.) and (r near2 g<br>near2 b)  | USPAT   | OR | ON  | 2004/04/02 18:29 |
| S56 | 633 | (two or dual) near4 agc   | USPAT   | OR | ON  | 2004/04/02 18:29 |
| S57 | 120 | (two or dual) near1 agc   | USPAT   | OR | ON  | 2004/04/02 18:29 |
| S58 | 631 | (white adj balance) and ((red or r)<br>with (coefficient or gain))  | USPAT   | OR | ON  | 2004/10/27 21:25 |
| S59 | 444 | (white adj balance) same ((red or<br>r) with (coefficient or gain))   | USPAT   | OR | ON  | 2004/10/27 21:25 |
| S60 | 257 | (white adj balance) same ((red or<br>r) near3 (coefficient or gain))  | USPAT   | OR | ON  | 2004/10/27 21:25 |
| S61 | 21  | ("4764805"   "4796085"  <br>"5008739"   "5260774"  <br>"5262849"   "5265200"  <br>"5325182"   "5371546"  <br>"5396441"   "5504524"  <br>"5506619"   "5528292"  <br>"5579047"   "5596367"  <br>"5808674"   "5821999"  <br>"5886797"   "5887085"  <br>"5987221"   "6421084"  <br>"6563537").PN. | USPAT   | OR | ON  | 2004/10/27 21:28 |
| S87 | 5   | "white balance" with ((two or<br>second) near3 stage)   | USPAT   | OR | ON  | 2004/11/12 13:17 |
| S89 | 4   | "white balance" with ((two or<br>second) near3 stage)   | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2004/11/12 13:17 |
| S91 | 39  | Vignetting near3 correction   | USPAT   | OR | ON  | 2004/11/12 13:22 |
| S92 | 7   | ccd same alternating adj color  | USPAT   | OR | ON  | 2005/12/22 01:40 |

## EAST Search History

|          |     |   |                                 |    |     |                  |
|----------|-----|---|---------------------------------|----|-----|------------------|
| S93      | 29  | ("4205337"   "4310847"  <br>"4330793"   "4418358"  <br>"4630120"   "4672424"  <br>"4703365"   "4709144"  <br>"4716456"   "4736251"  <br>"4745466"   "4823186"  <br>"4918523"   "4969204"  <br>"4982270"   "5023711"  <br>"5045932"   "5060061"  <br>"5081529"   "5255081"  <br>"5262847"   "5377025"  <br>"5543940"   "5619590"  <br>"5671013"   "5677528"  <br>"5978023"   "6356379"  <br>"6429953").PN. | USPAT                           | OR | ON  | 2005/12/22 01:40 |
| S94      | 85  | vignetting same axial   | USPAT                           | OR | ON  | 2005/12/22 01:40 |
| S95      | 670 | (382/274).CCLS.   | USPAT;<br>USOCR                 | OR | OFF | 2005/12/22 01:40 |
| S96      | 87  | (348/255).CCLS.   | USPAT;<br>USOCR                 | OR | OFF | 2005/12/22 01:40 |
| S97      | 122 | (348/252).CCLS.   | USPAT;<br>USOCR                 | OR | OFF | 2005/12/22 01:40 |
| S98      | 73  | (348/238).CCLS.   | USPAT;<br>USOCR                 | OR | OFF | 2005/12/22 01:40 |
| S99      | 71  | (348/237).CCLS.   | USPAT;<br>USOCR                 | OR | OFF | 2005/12/22 01:40 |
| S10<br>0 | 221 | ((382/274).CCLS.) and camera<br>and (luminance or brightness or Y<br>or luma)   | USPAT                           | OR | ON  | 2005/12/22 01:40 |
| S10<br>1 | 160 | luminance adj correction and<br>@ad<="19990226"   | USPAT                           | OR | ON  | 2005/12/22 01:40 |
| S10<br>2 | 286 | luminance adj correction and<br>@ad<="19990226"   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON  | 2005/12/22 01:40 |
| S10<br>3 | 104 | luminance adj correction and pixel<br>and @ad<="19990226"   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON  | 2005/12/22 01:40 |
| S10<br>4 | 59  | (348/228.1).CCLS.   | USPAT;<br>USOCR                 | OR | OFF | 2005/12/22 01:40 |
| S10<br>5 | 5   | ((348/228.1).CCLS.) and<br>luminance with correct   | USPAT                           | OR | ON  | 2005/12/22 01:40 |
| S10<br>6 | 11  | ((382/274).CCLS.) and camera<br>and ((luminance or brightness or Y<br>or luma) adj correction)  | USPAT                           | OR | ON  | 2005/12/22 01:40 |
| S10<br>7 | 517 | analog adj luminance  | USPAT                           | OR | ON  | 2005/12/22 01:40 |

## EAST Search History

|          |      |  |   |    |     |                  |
|----------|------|--|---|----|-----|------------------|
| S10<br>8 | 15   | analog adj luminance with correction           | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S10<br>9 | 121  | (348/234).CCLS.                                | USPAT;<br>USOCR                             | OR | OFF | 2005/12/22 01:40 |
| S11<br>0 | 84   | ((348/234).CCLS.) and @ad<="19990226"          | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S11<br>1 | 27   | analog adj luminance near5 correct\$4          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S11<br>2 | 2158 | luminance same discrete                        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S11<br>3 | 13   | luminance same discrete adj time               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S11<br>4 | 37   | pixel with luminance adj correction and camera | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S11<br>5 | 16   | axial adj luminance                            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S11<br>6 | 49   | color adj interleaved                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S11<br>7 | 1    | ("5644359").PN.                                | USPAT;<br>USOCR                             | OR | OFF | 2005/12/22 01:40 |
| S11<br>8 | 1    | ("4908701").PN.                                | USPAT;<br>USOCR                             | OR | OFF | 2005/12/22 01:40 |
| S11<br>9 | 1    | ("5870505").PN.                                | USPAT;<br>USOCR                             | OR | OFF | 2005/12/22 01:40 |
| S12<br>0 | 7    | luminance adj correction near5 position        | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S12<br>1 | 1946 | vignetting                                     | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S12<br>2 | 97   | vignetting with correction                     | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S12<br>3 | 4    | image adj falloff and correction               | USPAT                                       | OR | ON  | 2005/12/22 01:40 |

## EAST Search History

|          |        |   |   |    |     |                  |
|----------|--------|---|---|----|-----|------------------|
| S12<br>4 | 5      | image adj falloff and correction  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/12/22 01:40 |
| S12<br>5 | 168    | digital adj camera and ccd same<br>color adj filter and<br>@ad<="19990225"  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S12<br>6 | 29     | bayer adj filter  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S12<br>7 | 1      | ("5534916").PN.   | USPAT;<br>USOCR                             | OR | OFF | 2005/12/22 01:40 |
| S12<br>8 | 191    | coordinate adj position same sum  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S12<br>9 | 1      | ccd same (coordinate adj position)<br>same sum  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>0 | 3      | image adj drop-off  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>1 | 10     | image adj drop adj off  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>2 | 4      | image adj fall-off  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>3 | 33     | image adj fall adj off  | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>4 | 12     | ((ccd same (coordinate adj<br>position) same sum) (image adj<br>drop-off) (image adj drop adj off)<br>(image adj fall-off) (image adj fall<br>adj off)) and sum     | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>5 | 18     | ((ccd same (coordinate adj<br>position) same sum) (image adj<br>drop-off) (image adj drop adj off)<br>(image adj fall-off) (image adj fall<br>adj off)) and product | USPAT                                       | OR | ON  | 2005/12/22 01:40 |
| S13<br>6 | 13     | advantage with analog with<br>luminance   | USPAT                                       | OR | ON  | 2005/12/22 01:41 |
| S13<br>7 | 29     | analog adj luminance same<br>correction   | USPAT                                       | OR | ON  | 2005/12/22 01:41 |
| S13<br>8 | 327    | (348/223.1).CCLS.   | USPAT;<br>USOCR                             | OR | OFF | 2005/12/22 01:41 |
| S13<br>9 | 287819 | analog adj luminance and white<br>balance   | USPAT                                       | OR | ON  | 2005/12/22 01:41 |
| S14<br>0 | 63     | analog adj luminance and white<br>adj balance   | USPAT                                       | OR | ON  | 2005/12/22 01:41 |
| S14<br>1 | 524    | analog same (white adj balance)   | USPAT                                       | OR | ON  | 2005/12/22 01:41 |

## EAST Search History

|          |      |   |   |    |     |                  |
|----------|------|---|---|----|-----|------------------|
| S14<br>2 | 43   | analog same (white adj balance)<br>same rgb   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S14<br>3 | 41   | analog same (white adj balance)<br>with pixel   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S14<br>4 | 87   | (348/255).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2005/12/22 01:41 |
| S14<br>5 | 9    | ((348/255).CCLS.) and rgb   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S14<br>6 | 24   | ((348/255).CCLS.) and (r near2 g<br>near2 b)  | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S14<br>7 | 700  | (two or dual) near4 agc   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S14<br>8 | 143  | (two or dual) near1 agc   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S14<br>9 | 686  | (white adj balance) and ((red or r)<br>with (coefficient or gain))  | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S15<br>0 | 473  | (white adj balance) same ((red or<br>r) with (coefficient or gain))   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S15<br>1 | 273  | (white adj balance) same ((red or<br>r) near3 (coefficient or gain))  | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S15<br>2 | 21   | ("4764805"   "4796085"  <br>"5008739"   "5260774"  <br>"5262849"   "5265200"  <br>"5325182"   "5371546"  <br>"5396441"   "5504524"  <br>"5506619"   "5528292"  <br>"5579047"   "5596367"  <br>"5808674"   "5821999"  <br>"5886797"   "5887085"  <br>"5987221"   "6421084"  <br>"6563537").PN. | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S15<br>3 | 5    | "white balance" with ((two or<br>second) near3 stage)   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S15<br>4 | 6    | "white balance" with ((two or<br>second) near3 stage)   | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/12/22 01:41 |
| S15<br>5 | 43   | Vignetting near3 correction   | USPAT   | OR | ON  | 2005/12/22 01:41 |
| S15<br>6 | 4804 | camera and image with process\$4<br>same (product or sum)   | USPAT   | OR | ON  | 2006/01/09 10:34 |
| S15<br>7 | 2422 | camera and image with process\$4<br>with (product or sum)   | USPAT   | OR | ON  | 2006/01/09 10:35 |
| S15<br>8 | 1791 | camera and image with process\$4<br>with (product)  | USPAT   | OR | ON  | 2006/01/09 10:35 |



## EAST Search History

|          |     |   |   |    |     |                  |
|----------|-----|---|---|----|-----|------------------|
| S15<br>9 | 638 | camera and image with process\$4<br>near3 (product)                           | USPAT   | OR | ON  | 2006/01/09 10:35 |
| S16<br>0 | 416 | camera and image near3<br>process\$4 near3 (product)                          | USPAT   | OR | ON  | 2006/01/09 10:57 |
| S16<br>1 | 37  | camera and image near3 correct\$4<br>near3 (product)                          | USPAT   | OR | ON  | 2006/01/09 11:03 |
| S16<br>2 | 0   | camera and correct\$4 same gain<br>same first with second with<br>product     | USPAT   | OR | ON  | 2006/01/09 11:03 |
| S16<br>3 | 45  | camera and image near3 correct\$4<br>near3 (product)                          | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/09 11:03 |
| S16<br>4 | 4   | camera and correct\$4 same gain<br>same first with second with<br>product     | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/09 11:27 |
| S16<br>5 | 1   | ("5504524").PN.   | USPAT   | OR | OFF | 2006/01/09 11:27 |
| S16<br>6 | 7   | ccd same alternating adj color  | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S16<br>7 | 90  | vignetting same axial   | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S16<br>8 | 717 | (382/274).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 13:36 |
| S16<br>9 | 89  | (348/255).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 11:56 |
| S17<br>0 | 128 | (348/252).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 11:56 |
| S17<br>1 | 74  | (348/238).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 11:56 |
| S17<br>2 | 71  | (348/237).CCLS.   | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 11:56 |
| S17<br>3 | 246 | ((382/274).CCLS.) and camera<br>and (luminance or brightness or Y<br>or luma) | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S17<br>4 | 160 | luminance adj correction and<br>@ad<="19990226"                               | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S17<br>5 | 286 | luminance adj correction and<br>@ad<="19990226"                               | US-PGPUB;<br>USPAT;<br>EPO; JPO                         | OR | ON  | 2006/05/19 11:56 |
| S17<br>6 | 104 | luminance adj correction and pixel<br>and @ad<="19990226"                     | US-PGPUB;<br>USPAT;<br>EPO; JPO                         | OR | ON  | 2006/05/19 11:56 |

## EAST Search History

|          |      |  |   |    |     |                  |
|----------|------|--|---|----|-----|------------------|
| S17<br>7 | 61   | (348/228.1).CCLS.  | USPAT;<br>USOCR                             | OR | OFF | 2006/05/19 13:37 |
| S17<br>8 | 5    | ((348/228.1).CCLS.) and<br>luminance with correct  | USPAT                                       | OR | ON  | 2006/05/19 11:56 |
| S17<br>9 | 14   | ((382/274).CCLS.) and camera<br>and ((luminance or brightness or Y<br>or luma) adj correction) | USPAT                                       | OR | ON  | 2006/05/19 11:56 |
| S18<br>0 | 523  | analog adj luminance   | USPAT                                       | OR | ON  | 2006/05/19 13:37 |
| S18<br>1 | 16   | analog adj luminance with<br>correction  | USPAT                                       | OR | ON  | 2006/05/19 11:56 |
| S18<br>2 | 124  | (348/234).CCLS.  | USPAT;<br>USOCR                             | OR | OFF | 2006/05/19 11:56 |
| S18<br>3 | 84   | ((348/234).CCLS.) and<br>@ad<="19990226"   | USPAT                                       | OR | ON  | 2006/05/19 11:56 |
| S18<br>4 | 27   | analog adj luminance near5<br>correct\$4   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/05/19 11:56 |
| S18<br>5 | 2311 | luminance same discrete  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/05/19 11:56 |
| S18<br>6 | 14   | luminance same discrete adj time   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/05/19 11:56 |
| S18<br>7 | 43   | pixel with luminance adj correction<br>and camera  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/05/19 11:56 |
| S18<br>8 | 18   | axial adj luminance  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/05/19 11:56 |
| S18<br>9 | 52   | color adj interleaved  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/05/19 11:56 |
| S19<br>3 | 7    | luminance adj correction near5<br>position   | USPAT                                       | OR | ON  | 2006/05/19 11:56 |
| S19<br>4 | 2016 | vignetting   | USPAT                                       | OR | ON  | 2006/05/19 11:56 |
| S19<br>5 | 100  | vignetting with correction   | USPAT                                       | OR | ON  | 2006/05/19 11:56 |

## EAST Search History

|          |        |   |   |    |    |                  |
|----------|--------|---|---|----|----|------------------|
| S19<br>6 | 4      | image adj falloff and correction  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S19<br>7 | 5      | image adj falloff and correction  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/05/19 11:56 |
| S19<br>8 | 170    | digital adj camera and ccd same<br>color adj filter and<br>@ad<="19990225"  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S19<br>9 | 35     | bayer adj filter  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>1 | 198    | coordinate adj position same sum  | USPAT                                       | OR | ON | 2006/05/19 13:37 |
| S20<br>2 | 1      | ccd same (coordinate adj position)<br>same sum  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>3 | 3      | image adj drop-off  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>4 | 10     | image adj drop adj off  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>5 | 4      | image adj fall-off  | USPAT                                       | OR | ON | 2006/05/19 13:37 |
| S20<br>6 | 33     | image adj fall adj off  | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>7 | 12     | ((ccd same (coordinate adj<br>position) same sum) (image adj<br>drop-off) (image adj drop adj off)<br>(image adj fall-off) (image adj fall<br>adj off)) and sum     | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>8 | 18     | ((ccd same (coordinate adj<br>position) same sum) (image adj<br>drop-off) (image adj drop adj off)<br>(image adj fall-off) (image adj fall<br>adj off)) and product | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S20<br>9 | 13     | advantage with analog with<br>luminance   | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S21<br>0 | 30     | analog adj luminance same<br>correction   | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S21<br>2 | 294096 | analog adj luminance and white<br>balance   | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S21<br>3 | 63     | analog adj luminance and white<br>adj balance   | USPAT                                       | OR | ON | 2006/05/19 11:56 |
| S21<br>4 | 563    | analog same (white adj balance)   | USPAT                                       | OR | ON | 2006/05/19 13:37 |
| S21<br>5 | 46     | analog same (white adj balance)<br>same rgb   | USPAT                                       | OR | ON | 2006/05/19 11:56 |

## EAST Search History

|          |      |  |   |    |     |                  |
|----------|------|--|---|----|-----|------------------|
| S21<br>6 | 43   | analog same (white adj balance)<br>with pixel                        | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S21<br>7 | 89   | (348/255).CCLS.  | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 13:36 |
| S21<br>8 | 10   | ((348/255).CCLS.) and rgb  | USPAT   | OR | ON  | 2006/05/19 13:36 |
| S21<br>9 | 24   | ((348/255).CCLS.) and (r near2 g<br>near2 b)                         | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S22<br>0 | 725  | (two or dual) near4 agc  | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S22<br>1 | 154  | (two or dual) near1 agc  | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S22<br>2 | 714  | (white adj balance) and ((red or r)<br>with (coefficient or gain))   | USPAT   | OR | ON  | 2006/05/19 13:36 |
| S22<br>3 | 487  | (white adj balance) same ((red or<br>r) with (coefficient or gain))  | USPAT   | OR | ON  | 2006/05/19 13:36 |
| S22<br>4 | 280  | (white adj balance) same ((red or<br>r) near3 (coefficient or gain)) | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S22<br>6 | 5    | "white balance" with ((two or<br>second) near3 stage)                | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S22<br>7 | 6    | "white balance" with ((two or<br>second) near3 stage)                | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/05/19 11:56 |
| S22<br>8 | 46   | Vignetting near3 correction  | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S23<br>3 | 7    | ccd same alternating adj color                                       | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S25<br>6 | 347  | (348/223.1).CCLS.  | USPAT;<br>USOCR   | OR | OFF | 2006/05/19 12:20 |
| S25<br>7 | 5037 | camera and image with process\$4<br>same (product or sum)            | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S25<br>8 | 2537 | camera and image with process\$4<br>with (product or sum)            | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S25<br>9 | 1881 | camera and image with process\$4<br>with (product)                   | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S26<br>0 | 669  | camera and image with process\$4<br>near3 (product)                  | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S26<br>1 | 434  | camera and image near3<br>process\$4 near3 (product)                 | USPAT   | OR | ON  | 2006/05/19 11:56 |
| S26<br>2 | 40   | camera and image near3 correct\$4<br>near3 (product)                 | USPAT   | OR | ON  | 2006/05/19 11:56 |

## EAST Search History

|          |    |   |   |    |    |                  |
|----------|----|---|---|----|----|------------------|
| S26<br>3 | 51 | camera and image near3 correct\$4<br>near3 (product)                      | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/19 11:56 |
| S26<br>4 | 5  | camera and correct\$4 same gain<br>same first with second with<br>product | US-PGPUB;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/05/19 11:56 |